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ABSTRACT

Evidence about minority students' educational and career decisions, especially as they apply to careers in management, is reviewed. Problems of data collection concerning minority students are identified, including the following: methodological difficulties in identifying the race of respondents and in weighting procedures that may result in inflated or deflated estimates of minority college enrollment; the use of unrepresentative samples of minority students and colleges as the sources of data on which conclusions about minority students are made. Information concerning the flow of minority students through higher education is also examined, along with the fields of study minority students pursue and the way that their choices change. The evidence suggests that minority students are highly motivated to achieve college and advanced education, but there is unequal distribution of minorities into types of colleges and programs and differential dropout rates. Despite a high enrollment rate in college, the pool of minority college seniors who enter graduate or professional school is smaller that it ideally would be. Attention is directed to programs that have attempted to alter minority students' negative perceptions of business and to provide the needed financial aid. Directions for future research are also addressed and a 35-item bibliography is appended. (SW)

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Career Decisions of Minority Students and Entrance to Graduate Management Programs

Although the number of minority students who enrolled in graduate management programs and who later chose careers in management increased measurably in the 1960s, these increases leveled off in the 1970s, and today there are reports of declining minority enrollments. These facts have importance beyond their implications for graduate schools of management. Although an MBA is not the only educational route to high-level management positions, it is a common route, and a route that typically results in entry to the management sequence of positions. Using the perspective that 15 to 25 years of an individual's career are normally needed to reach the middle- and upper-management positions, it is clear that minorities could be severely underrepresented in the year 2000. The general social implications of these trends are increased by the statistics that show that, among persons of equal education and age, those in business fields have higher incomes (Gottfredson, 1978a). Thus, business careers would seem to offer minorities some of the best opportunities for social progress. However, as Gottfredson (1978b) shows, Blacks--including college-educated Blacks--are underrepresented in business careers. Census data suggests the same situation for other minorities. It is important to understand the possible reasons for these trends and their implications for graduate management programs.

The purpose of this review is to summarize the most important and salient evidence about minority educational and career decisions, especially

as they apply to careers in management. It concentrates on highlighting basic facts and the results of major studies. Before beginning the review, however, we have to consider some methodological difficulties.

Problems of Data Collection Among Minority Students

Out of the key problems that limits the assessment of the plans and aspirations of minority students involves the difficulty of collecting accurate information about these students. First, there are methodological difficulties in identifying the race of respondents and in weighting procedures which may result in inflated or deflated estimates of minority college enrollment. That is, most of the data examined here is based on responses to self-report questionnaires. Because questions about race and ethnicity are laden with emotion for many students, they frequently are not answered, or answered "other" and "none of the above." Various surveys have reported response rates to such questions between 50 and 90 percent. This incompletion rate may lead to underestimates of minorities. Therefore, various weighting procedures, such as those used in the American Council on Education surveys, are used to estimate population statistics. Obviously, if the weight is too large, the numbers are inflated; if too small, the numbers are under-estimates. Because of these difficulties, these inaccurate weights may lead to inappropriate conclusions.

A second type of problem lies in the use of unrepresentative samples of minority students and colleges as the sources of data on which conclusions about minority students are made. This creates data problems

that are frequently ignored. For example, many minority students in two-year colleges enrolled in vocational programs are included in the higher education counts and are mistaken as baccalaureate students. In addition, the definitions of institutions of higher education as distinct from other forms of postsecondary education are often blurred. For example, in 1978 there were nearly one-half million students enrolled in programs of business, office work, marketing and distribution in noncollegiate postsecondary schools, many of whom were probably minority students. However, these students are not included in counts of college students, although their counterparts in very similar programs in higher education institutions are, even when they are not degree-oriented.

Many studies are chiefly based on students enrolled in predominantly minority colleges, and others are based on minority students enrolled in White institutions. Neither sample is entirely representative of minority students. One result of these various definitional and sampling problems is that "official" estimates of enrollments and trends for minority students can differ significantly (Institute for the Study of Educational Policy, 1976).

The final problem lies in the gaps in the basic data. Some important information is not available by racial or ethnic group, other data has been collected only intermittently, and other data has been collected in such a way as to leave important questions unanswered. An example of the first is the lack of breakdowns by ethnic group of enrollments in predominantly minority colleges; of the second, the dropout rate; and of the third, the data on enrollments in various first professional degree or graduate

degree programs which do not include the fields in which most minority students are enrolled. These various limitations apply in different degrees to different studies. They should be kept in mind as the data is examined in the following pages.

Basic Enrollment Facts

To be able to realistically assess the career decisions of minorities we need to have some basic information about the flow of minority students through higher education. This section is designed to provide this information.

Prior to college entrance, what are the attitudes of various ethnic groups toward a college education? The data in Table 1, which is consistent with various other surveys, show that more non-Whites, less well-educated people, and people with lower incomes believe college is very important than do Whites, well educated people and wealthy people. Thus, the basic attitude of minority and poor people toward college education appears quite positive. Consistent with this finding, many studies have found minority high school seniors have higher educational aspirations than whites (Institute for the Study of Educational Policy, 1976) as suggested in Table 2. Higher percentages of Blacks than Whites plan to graduate from two-year colleges, four-year colleges, and attend graduate or professional school after college. Similar trends hold for Hispanics. This positive attitude is carried over into higher actual enrollment of minority high school graduates. As shown in Figure 1, the percentages of

Table 1

Public opinion on the importance of a college education, by race, educational attainment, and income level of respondent: 1978

Characteristic	Total	"How important is a college education today—very important, fairly important, or not too important?" Very important	Fairly important	Not too important	Don't know/ no response
	Percentage distribution				
All respondents	100	36	46	16	2
Race					
White	100	35	47	16	2
Other	100	46	32	18	4
Educational attainment					
Grade school	100	44	33	18	5
High school	100	34	46	19	1
College	100	35	52	11	2
Income level					
Under $7,000	100	45	39	13	3
$7,000 to $9,999	100	37	48	15	0
$10,000 to $14,999	100	33	40	26	1
$15,000 to $19,999	100	31	53	14	2
$20,000 and over	100	33	49	16	2

SOURCE: Phi Delta Kappa, Inc., "The Tenth Annual Gallup Poll of the Public Attitudes Towards the Public Schools", *Phi Delta Kappan*, September, 1978

Reproduced from U.S. Department of Health, Education and Welfare, The Condition of Education, 1979.

Table 2

Post high school plans of secondary school seniors: 1978

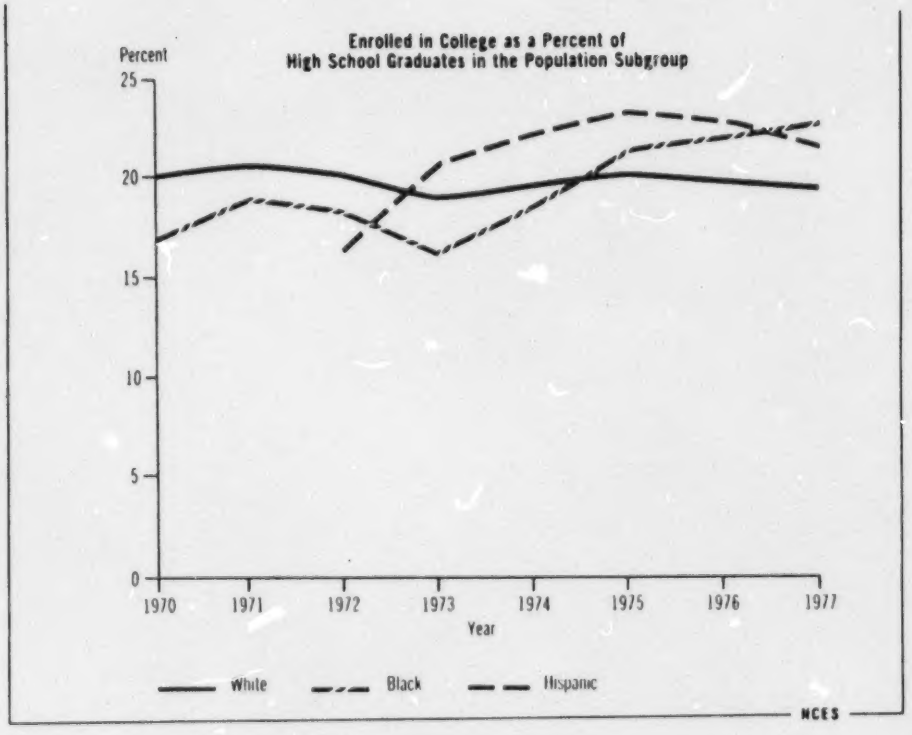
Item	Total	Sex		Race	
		Male	Female	White	Black
How likely is it that after high school you will	Percentage distribution				
Attend technical vocational school					
Total	100.0	100.0	100.0	100.0	100.0
Definitely will	8.9	9.2	8.6	8.2	12.9
Probably will	19.3	21.7	16.8	17.9	26.5
Probably won't	29.7	30.9	28.4	30.3	25.9
Definitely won't	42.1	38.2	46.2	43.7	34.7
Serve in the armed forces					
Total	100.0	100.0	100.0	100.0	100.0
Definitely will	4.4	7.3	1.6	3.4	11.2
Probably will	7.6	11.4	3.9	6.3	15.4
Probably won't	25.4	32.9	18.2	25.8	20.8
Definitely won't	62.6	48.4	76.3	64.5	52.6
Graduate from a 2-year college					
Total	100.0	100.0	100.0	100.0	100.0
Definitely will	10.7	8.7	12.5	10.3	11.0
Probably will	20.3	19.0	21.4	18.6	28.9
Probably won't	30.8	33.9	28.0	31.6	28.2
Definitely won't	38.1	38.3	38.2	39.6	32.0
Graduate from a 4-year college					
Total	100.0	100.0	100.0	100.0	100.0
Definitely will	29.7	30.4	29.3	29.9	32.2
Probably will	21.6	22.7	20.6	21.5	22.8
Probably won't	19.1	19.3	18.6	18.6	20.2
Definitely won't	29.7	27.5	31.4	30.0	24.9
Attend graduate professional school after college					
Total	100.0	100.0	100.0	100.0	100.0
Definitely will	8.7	9.5	8.1	7.8	13.6
Probably will	21.3	21.8	21.0	21.1	23.3
Probably won't	32.4	33.0	31.7	32.9	30.9
Definitely won't	37.6	35.7	39.2	38.2	32.2

NOTE: Details may not add to totals because of rounding.

SOURCE: Monitoring the Future, Survey Research Center, Institute for Social Research, The University of Michigan, unpublished tabulations.

Reproduced from U.S. Office of Education, The Condition of Education, 1980.

Figure 1



SOURCE: U.S. Department of Commerce, Bureau of the Census, Social and Economic Characteristics of Students, P-20, and unpublished tabulations.

Reproduced from U.S. Office of Health, Education and Welfare, The Condition of Education, 1979.

Black and Hispanic high school graduates who are enrolled in some form of college are actually higher than the percentage of Whites.

Overall, 9.2 percent of all freshmen in 1979 were Black, 1.4 percent were Oriental, 1.2 percent were Mexican-American/Chicano, 1.0 percent were Indian, and 1.2 percent were Puerto-Rican (ACE Freshman Norms, 1979). However, these figures need to be examined in light of where minority students are enrolled. Table 3 shows minority students tend to be concentrated in public two-year colleges, and to a lesser extent in public four-year colleges. Compared to Whites, they are less often found in private or public universities.

Thus, minority students are represented in large numbers in colleges, although they are concentrated in certain types of institutions. Once they enter college what happens? A major national study by Astin (1975) shows that, in the first year, with the exception of Orientals, minority students are more likely to drop out. The dropout rate for Blacks was 29 percent, for Indians 31 percent, for Hispanics 31 percent, for Whites 24 percent and for Orientals 19 percent. Similarly, based on a national longitudinal study of high school seniors, Eckland and Wisenbaker (1979) found that the dropout rates for minorities over four years was considerably higher than the rate for whites (Table 4). Hispanics had an especially high dropout rate. The corresponding graduation rates were lower for Blacks and Hispanics. Although studies suggest that the dropout rates for various ethnic groups are approximately the same when ability and background variables are taken into account, and that when minority students do gain access to four-year colleges and universities they tend

Table 3

Enrollment in institutions of higher education, by racial/ethnic group and control and type of institution: Fall 1978

Type and control of institution	Total	White	Black	Hispanic	Asian or Pacific Islander	American Indian/ Alaskan Native	Non-resident alien
All institutions							
Number	11 231 172	9 194 031	1 054 371	417 271	235 064	77 873	252 580
Percent	100 0	100 0	100 0	100 0	100 0	100 0	100 0
Public universities							
Number	2 062 293	1 807 325	102 162	36 027	42 633	9 738	64 408
Percent	18 4	19 7	9 7	8 6	18 1	12 5	15 5
Private universities							
Number	718 434	600 237	44 825	17 091	17 871	2 266	36 144
Percent	6 4	6 5	4 3	4 1	7 6	2 9	14 3
Public other 4-year							
Number	2 833 759	2 277 778	322 718	104 221	56 468	17 447	55 127
Percent	25 2	24 8	30 6	25 0	24 0	22 4	21 8
Private other 4-year							
Number	1 589 220	1 341 883	142 050	33 014	20 869	5 541	44 863
Percent	14 1	14 6	13 5	7 9	8 9	7 1	17 8
Public 2-year							
Number	3 873 690	3 050 957	414 640	222 284	96 300	41 263	48 246
Percent	34 5	33 2	39 3	53 3	41 0	53 0	19 1
Private 2 year							
Number	154 776	115 833	27 976	4 634	923	1 618	3 792
Percent	1 4	1 3	2 7	1 1	4	2 1	1 5

[1] Represents the total head count for all races of students in the 50 States and D C , a difference of 31,184 from the total head count of all students because some institutions were unable to identify the race of students enrolled
[2] Non-Hispanic

NOTE Details may not add to totals because of rounding

SOURCE U S Department of Health, Education, and Welfare, National Center for Education Statistics, *Fall Enrollment in Higher Education 1978*, 1980

Reproduced from U.S. Office of Education, The Condition of Education, 1980.

Table 4

Enrollment and degree status of 1972 academic college entrants as of October 1976, by racial-ethnic group and sex.

Educational Status as of October 1976	Whites		Blacks		Hispanics		All Persons*
	Men	Women	Men	Women	Men	Women	
				Percent			
TOTALS	100	100	100	100	100	100	100
Dropouts	34	34	43	46	57	54	35
No degree, but still enrolled	30	20	30	22	29	28	26
Graduated	36	46	27	32	14	18	39
				Number			
Respondents	3,352	2,892	335	506	137	113	7,697

*Includes American Indians, Asian Americans, and other ethnic groups, as well as persons not classified by ethnic group membership or sex.

Source: Reproduced from Eckland & Wisenbaker, 1979.

to persist, the point remains that their absolute numbers decline sharply over the college years (Institute for the Study of Educational Policy, 1976). This is reflected in the fact that minority students attain a small percentage of bachelor's degrees, smaller than their representation among college freshmen (except among Asian/Americans), as shown in Table 5. (Similar trends hold for all other degrees. Note that non-resident aliens obtain almost twice as many doctoral degrees as do American minorities.)

The level of enrollment of minorities in graduate and professional schools is also low--a level lower than those for bachelor's degrees--as shown in Table 6. (First professional fields include dentistry, medicine, veterinary medicine, and law. Graduate fields include the traditional arts and science fields as well as business and management, engineering, education, and some smaller fields.)

Thus, we are left with a picture of fairly equal entrance of minority and White high school graduates into colleges, but with minorities more often attending two-year colleges and state colleges. Minorities drop out at a higher rate than Whites throughout college, obtain fewer bachelor's degrees and enroll in graduate and professional school less often. The population of minority students dwindles at every step in the progression of higher education, leaving a relatively small group of minority students who might enter graduate and professional school. We shall examine research that may explain these findings in a later section. Now we turn to the facts on enrollment trends for different fields.

Table 5

Representation of racial/ethnic groups among degree recipients, by level of degree: Aggregate United States, 1975-76.

Item	Total	White[1]	Black[1]	Hispanic	American Indian/ Alaskan Native	Asian American/ Pacific Islander	Non-resident alien
				Percentage distribution			
College-age population	100.0	81.5	12.4	4.9	0.5	0.7	—
Bachelor's	100.0	87.4	6.4	2.8	0.4	1.5	1.6
Master's	100.0	84.5	6.5	2.0	0.3	1.5	5.2
Doctor's	100.0	81.0	3.6	1.2	0.3	1.9	12.0
First-professional	100.0	90.2	4.3	2.2	0.3	1.7	1.3

[1] Non-Hispanic.
NOTE: Details may not add to totals because of rounding.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, "Earned Degrees Conferred, 1975-76 Summary Data, by Racial/Ethnic Categories," unpublished.

Reproduced from U.S. Department of Health, Education and Welfare, The Condition of Education, 1979.

Table 6

Enrollment in postcollegiate institutions, by type of enrollment and ethnicity

	First Professional	Graduate
Black	4.5	5.7
American Indian-Alaskan Native	.4	.3
Asian or Pacific Islander	1.9	1.9
Hispanic	2.7	2.3
Non-resident Alien	1.2	6.8
White	89.3	83.0

SOURCE: Special Tabulations made from National Center for Education Statistics, Fall Enrollment in Higher Education, 1978.

Field Choices at Different Stages of Higher Education

What fields of study do minority students pursue and how do their choices change? Prior to college entry, minority students, particularly Blacks, express considerable interest in business. Based on the responses of students who take the College Board's SAT examination, Table 7 shows that the distribution of intended majors among the various ethnic groups are fairly similar, with the exception that Oriental students more frequently plan to enter the physical sciences and less frequently to enter the social sciences. (In all groups, the SAT scores for those planning business majors are slightly below the average for the total group.)

Although more recent breakdowns of freshman choices are not currently available, a 1972 American Council on Education (ACE) study showed that Black college freshmen did enroll in business and the social sciences more frequently than did Whites (Bayer, 1972). In addition, the percentage of Blacks planning business careers was also higher than the percentage among Whites. (Distribution of business enrollment among freshmen in Black colleges in the 1979 ACE norms were very similar [Astin, King, & Richardson, 1979].) For both Blacks and Whites the actual percentages of freshmen enrolled in business was smaller than the percentage of high school seniors planning to enroll in business.

This trend apparently continues throughout the college years, reflected in the percentages of students who obtain bachelor's degrees in various fields in the United States, as shown in Table 8. "Other"

Table 7

Distribution of Intended Areas of Study Among SAT Takers, 1980

	American Indians	Blacks	Mexican-American	Orientals	Puerto-Rican Mainland	Whites	Other
(N)	4,360	79,825	14,922	27,993	7,102	727,370	19,788
Arts and humanities	13.8	10.6	12.0	9.9	12.0	12.5	13.6
Biological sciences and related areas	22.2	19.0	19.4	25.1	21.3	20.7	21.8
Business, commerce, and communications	20.0	26.9	21.1	18.7	23.1	22.0	19.1
Physical sciences and related areas	17.9	18.6	20.3	29.5	16.5	18.1	22.6
Social sciences and related areas	19.5	20.8	21.4	10.4	20.8	19.6	16.6
Miscellaneous	6.6	4.0	5.8	6.3	6.3	7.1	6.3

Special tabulations from data collected by College Board.

Table 8

Distribution of bachelor's degrees conferred among selected academic fields, by racial/ethnic group: Aggregate United States, 1975-76.

Academic field	White[1]	Black[1]	Hispanic origin	American Indian/ Alaskan Native	Asian American/ Pacific Islander	Non-resident alien
			Percentage distribution			
Total	100.0	100.0	100.0	100.0	100.0	100.0
Education	16.6	24.0	16.9	21.2	7.8	5.1
Social sciences	13.3	18.6	15.8	14.7	12.6	12.1
Business	15.4	16.0	15.2	12.2	17.4	19.8
Engineering	4.9	2.3	4.7	4.3	8.1	21.1
Other	49.8	39.1	47.4	47.6	54.1	41.9

[1] Non-Hispanic.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, "Earned Degrees Conferred, 1975-76 Summary Data, by Racial/ Ethnic Categories," unpublished.

Reproduced from U.S. Department of Health, Education and Welfare, The Condition of Education, 1979.

includes arts and humanities which accounts for approximately 14 percent of White bachelors, 9 percent of Blacks, and 20 percent of Hispanic Americans--which is partly due to their high enrollments in language programs; biological science which accounts for approximately 4 to 5 percent of each group; and the physical sciences which also accounts for approximately 4 to 5 percent of each group. Business composes about 15 percent of the enrollment of Whites, Blacks, and Hispanics. Apparently, Blacks tend to migrate into the social sciences and education at a higher rate than Whites.

Tables 9 and 10 show the percentages of Black, Hispanic and White students enrolled in first professional and graduate studies. By comparing the percentages in Table 8 and Table 10 we see that the percentages for Blacks and Hispanics entering graduate management programs is smaller than those receiving bachelor degrees in this field. At the same time the percentage for White students increased slightly.

Thus, over the course of higher education the numbers and percentages of minority students pursuing studies in business seems to drop at each stage. Although there is a corresponding trend among White students, the drop is not as large and, most important, about the same percentage of graduate-level students among Whites are pursuing business studies as were White seniors.

Minority Career Decisions

Given the gradual decline in enrollments of minority students in business, especially at the graduate level, how may we account for it?

Table 9

Number and percent of black, Hispanic and white first-professional enrollment in selected fields of study: Fall 1978.

Selected fields of study	Black		Hispanic		White, non-Hispanic	
	Number	Percent	Number	Percent	Number	Percent
Total	11,424	100.0	5,353	100.0	229,306	100.0
Dentistry	918	8.0	421	7.9	19,467	8.5
Medicine	3,518	30.8	1,609	30.1	58,798	25.6
Law	5,371	47.0	2,826	52.8	107,570	46.9
Veterinary medicine	147	1.3	39	0.7	6,890	3.0
Other	1,469	12.9	458	8.6	36,174	16.0

[1]The survey did not collect data on any other first-professional field of study than the above.

NOTE.-Details may not add to totals because of rounding.

SOURCE: U.S. Department of Health, Education, and Welfare, National Center for Education Statistics, Opening Fall Enrollment, 1978, special tabulations.

Table 10

Number and percent of Black, Hispanic and white graduate enrollment in selected fields of study: Fall 1978.

Selected fields of study	Black		Hispanic		White, non-Hispanic	
	Number	Percent	Number	Percent	Number	Percent
Total	61,923	100.0	21,060	100.0	891,727	100.0
Agriculture/natural resources	229	0.4	154	0.7	12,677	1.4
Architecture/environmental design	431	0.7	179	0.9	7,466	0.8
Biological sciences	1,069	1.7	502	2.4	35,583	4.0
Business and maragement	7,118	11.5	2,198	10.5	147,682	16.6
Engineering	905	1.6	309	1.5	37,460	4.2
Physical sciences	630	1.0	290	1.4	27,694	3.1
Other[1]	51,541	83.2	17,428	82.8	623,215	69.9

[1]The survey did not collect detailed data on any other graduate fields of study than the above.

SOURCE: U.S. Department of Health, Education and Welfare, National Center for Education Statistics, Opening Fall Enrollment, 1978, special tabulations.

To gain an answer we need to examine how career decisions are made. There are a variety of theories about career decision making (Osipow, 1973). Some of these, such as Supers', have emphasized the developmental aspects of career decisions, by which the individual progresses through stages of exploration, identification and crystalization of choices over the years, frequently from the junior high years into college-age years. Other theories, such as Holland's, emphasize the consistency between individuals' personalities and experiences and their choices. All of them emphasize the role of interests in vocational choices, although the degree to which this is a central concept varies. Oddly, one of the striking gaps in the research is the measurement of the interests of minority students. Although there are a few studies, this critical area has generally been neglected. This is a sharp contrast to the considerable research activity that has centered around making interest inventories fair and reasonable to women.

One of the chief results of research on vocational choices is that the general preferences among vocational choices tend to be formed in the high school years, although many students remain undecided about a specific choice late into their college careers. For example, students may develop general preferences for working with people, and then may later decide on a more specific field such as social work, psychology, personnel work, etc.

The studies of minority aspirations and career choices suggest high aspirations, with a preference for fields in which working with people is a major component (Gurin & Katz, 1966). These are frequently

education and the social sciences, as we have noted earlier. In general, however, it is not entirely clear whether the process of choosing a vocation is different for minority students, and, if it is different, how.

There are some suggestive findings, however. For example, a few studies suggest that the measured interests of Blacks are as strong or stronger in business than Whites (Hager & Elton, 1971; Kimball, Sedlach, & Brooks, 1973; Doughtie et al., 1976) and that the constructs and structure of interests are substantially the same for Black and White college students (Yom et al., 1975; Wakefield et al., 1975). Other research suggests that minority and majority students have similar experiences with business. In a study of work experiences (American College Testing Program, 1972), minority and majority college applicants had, with equal frequency, worked for pay, supervised the work of others, earned a merit raise, found jobs on their own, and changed jobs because of better opportunities.

The ACE surveys (Bayer, 1972) asked students to rate the importance of various life goals. (These life goals have been shown to be related to vocational choices in a variety of studies, e.g., Baird, 1970.) Table 11 shows the five most important goals for all students, plus four goals that are related to the choice of business careers.

Although the top five goals receive fairly similar endorsements from the ethnic groups, Blacks place more importance on "being an authority in my field." Blacks consistently placed more emphasis on the business-oriented goals than did the Whites, with Hispanics in the middle.

Table 11

Life Goals of ACE Freshmen

(Percentage indicating each goal was essential or very important)

	Group		
	Black	Hispanic	White
A. Top Five			
1. Help others in difficulty	72	70	66
2. Be an authority in my field	72	61	60
3. Develop a philosophy of life	69	62	70
4. Have friends different from me	56	64	64
5. Raise a family	55	57	50
B. Business Oriented			
1. Be well off financially	54	46	39
2. Succeed in my own business	51	44	41
3. Be administratively responsible	30	25	19
4. Be an expert in finance	23	17	13

SOURCE: Special tabulations from data in Bayer (1972).

A similar result, based on a comparison of Black and nonblack college students was obtained by Freeman (1975). Although interest in the work was the most important characteristic for both groups (95 percent of Black students and 82 percent of nonblack students considered it important), stability of income or employment (82 percent to 21 percent) and level of income (63 percent to 16 percent) were much more important to the Black students compared to the nonblack students. (Needs of the Black community was also important.) Although other studies, such as Davis (1964) and Baird, Hartnett and Clark (1973) did not show such a concern with income among minority college seniors, their results may have been due to the phrasing of their questions, which emphasized income per se rather than its stability. However, Baird, Hartnett and Clark (1973) did find that "security" was more important to Black seniors than to White seniors.

In sum, many minority students appear to be interested in business and in the kinds of high incomes that business courses can lead to. If this is so, why do relatively few minority students enroll in MBA programs? Research suggest two possible reasons: the image of management careers, and the financial situation of minority students.

The survey conducted by Baird, Hartnett, and Clark (1973) asked a national sample of college seniors for their views of five careers: medicine, law, college teaching, school teaching, and business. Business was rated by far the least secure, the least challenging and interesting, and as providing the fewest opportunities for helping other people. In contrast, it was described as the occupation with the greatest pressures,

and the one in which success was most dependent on a pleasing personality. Finally, except for school teaching, business was seen as the field with the largest overabundance of qualified people. Clearly, if minority students value security in a profession, opportunities to help others, interesting work activities, and a field that would have many openings for qualified people, they would not choose business with such a image in mind. Similar results were obtained by Fichter (1967) and Freeman (1975) who found that Black college students rated business as having the fewest opportunities for entry and advancement for Blacks among a variety of careers. Gurin and Epps (1975) also found that, although becoming more positive in recent years, Black students see business as having "closed doors" for minority students. In general, both Freeman and Gurin and Epps found that Black students' views of a variety of careers did not correspond very well with the realities of those careers.

The second factor, finances, affects minority graduate enrollment generally, but may apply with special effect to business because of the relatively smaller amount of aid available to business students compared to some other fields. For example, in Baird's (1974) study of a follow-up of a national sample of college seniors a year later, students who were not attending graduate or professional school were asked why. As shown in Table 12, the reasons "needed money" and "couldn't afford it" were more important among Blacks than among Whites. In contrast, such reasons as "simply did not want to," "could enter and succeed in my field without further education," and "was tired of being a student" were considerably more important among Whites than Blacks. In short, Blacks tended to emphasize economic reasons, while Whites tended to emphasize motivational reasons.

Table 12

Reasons for not attending graduate or professional school for all students not attending, by sex, and by race (figures show percentage of each group citing reason).

Reason	Total Not attending	By sex		By race	
		Men Not attending	Women Not attending	Blacks Not attending	Whites Not attending
Needed money	32.1	30.3	33.3	38.2	31.0
Simply did not want to	19.8	16.7	23.0	3.1	20.4
Could enter and succeed in my field without further education	17.8	18.7	16.1	4.7	18.1
Couldn't afford it	24.6	20.4	29.2	31.2	23.7
Undergraduate grades were not high enough	7.1	10.0	3.1	2.3	7.2
Was tired of being a student	35.1	32.1	37.5	16.4	35.1
Had family responsibilities	14.3	12.9	15.5	16.4	14.2
Low admission test scores (GRE, LSAT, etc.)	3.6	4.5	2.3	4.7	3.4
Discouraged by undergraduate faculty	1.7	1.8	1.5	.8	1.5
Anxious to enter job market	14.9	14.1	15.3	7.0	14.9
Was not accepted by any of the graduate or professional schools of my choice	5.9	8.4	2.4	2.6	5.8
Had military obligations	8.7	14.9	.4	3.9	8.7
I was anxious to get practical experience before going on for more education	37.8	33.3	42.2	35.9	37.1
Other	13.7	12.5	14.9	13.3	13.5

SOURCE: Baird (1974).

Similar results were obtained in the third follow-up of the National Longitudinal Study's high school class of 1972 in 1977. The students who had attended college, but who had not gone on to graduate or professional school were asked why. As shown in Table 13, Blacks, compared to Whites, placed more importance on the reasons "family responsibilities," and "cannot afford it," while Whites placed more importance on the reasons "no interest," "can obtain satisfactory income without advanced study," "don't need an advanced degree," and "tired of school." Family responsibilities were also important to Hispanics. In this sample, the economic demarcation was particularly clear; 43 percent of the Whites felt they could obtain a satisfactory income without further study in contrast to only 12 percent of the Blacks; while 57 percent of the Blacks said they could not afford further study in contrast to 43 percent of the Whites. Thus, it appears that many Black college students may be caught in the predicament of feeling that they cannot obtain the incomes they desire without further education, but also feeling that they cannot afford to go on. Very similar findings were reported by Gurin and Epps (1975), who found that large majorities of Black college students would like to continue on to further study but that financial considerations presented major stumbling blocks. In short, present and future financial considerations tend to limit the participation of Blacks and other minorities in advanced study. This result should be expected because of the dramatically lower family incomes of Black and other minority students found in virtually every survey.

Table 13

NLS respondents' reasons for not attending graduate or professional school (percentage citing each reason).

Reason	Group					
	Black	White	Hispanic	Indian	Oriental	Other
No interest	7	17	9	16	17	19
Family responsibilities	22	11	32	0	18	8
Refused loan	4	1	0	0	0	0
Cannot afford it	57	43	41	19	45	31
Can obtain satisfactory income without advanced study	12	43	41	19	45	31
Wanted more work experience before graduate school	41	48	17	85	53	21
Uncertain about career goals	21	27	21	0	26	12
Don't need an advanced degree	7	22	17	0	27	25
Tired of school	15	34	6	50	40	15
Not accepted where I wanted to go	2	3	8	0	5	10
Have a health or physical handicap	2	1	0	0	0	2
Other	9	14	10	0	25	26

SOURCE: Special tabulations from U.S. Department of Health, Education and Welfare, National Longitudinal Study: Tabular Summary of the Third Follow-up Questionnaire Data, 1978.

Institutional Influences

There is some general evidence that various aspects of the college experience impinge on students' career choices (Astin & Panos, 1969). It is clear, to use a very simple example, that there are regional differences in enrollment patterns. Thomas (1978), using 1974 Office of Civil Rights data, found that Blacks and Whites attended two-year colleges at the same rate in the south, and at similar rates in the midwest and northeast; in the west, however, 70 percent of Black undergraduate enrollment was in two-year colleges in contrast to 48 percent of White enrollment. Black students enrolled in traditionally Black colleges majored in business more frequently than Blacks in predominantly White colleges. At the graduate level, Blacks and Whites studied business at about the same rate in the northeast and midwest, but Blacks studied business less frequently in the south and west. The field of education was pursued by Blacks more than Whites in the south and in traditionally Black colleges. Thus, it would appear that colleges in different regions and of different types may influence students' choices differently.

However, it is probable that the college characteristics that influence career decisions of minority students are more subtle. For example, research results reported by Pfeifer and Schneider (1974) at the University of Maryland showed that Blacks scored higher than Whites on scales describing the environment as impersonal, the administration as neglectful, and the institution as racist. In contrast, Reichard, Sutton, Pratt, and Uhl (1981) reported that Black students at the University of North Carolina-Greensboro were as satisified with their college as

Whites, and reported the same quality of relations with their peers and professors; in fact, Blacks scored higher on a scale designed to measure group cohesiveness, a friendly assimilation into campus life, and a campus commitment to intellectual pursuit (Campus Morale). There is some evidence that these kinds of variables affect the aspirations and career decisions of college student (Astin & Panos, 1969; Astin, 1977). Thus, it is possible that the more subtle aspects of institutional climate influence students' career choices.

Intervention Programs

In response to the situation described in the previous pages, various programs have been developed to investigate and change the access of minority students into various postgraduate studies (Blackwell, 1975). For example, the American Medical Association specifically developed programs to encourage Black students to think about careers in medicine. One of the programs had Black medical students visit traditionally Black colleges and talk to the students, another involved visits to high schools, another had medical school faculty visit colleges, and another sought to inform counselors about opportunities in medicine (Eliot, 1969). There is also a fairly elaborate program in engineering (Landis, 1976).

More specifically related to graduate management study, schools such as the Wharton School, Harvard, and UCLA have been able to increase their enrollments of Blacks by special recruiting efforts in predominantly Black colleges and in community colleges. A study by Young and Associates conducted for the Northwestern School of Management found that recruitment

of Black students was particularly effective when there is early recruitment in the high school years with systematic follow-ups. They specifically recommended that a career education program be developed in the public schools that would expose students to the requirements and opportunities of the business world at an early age, and a more effective and informative counseling program be developed so students can understand and make appropriate personal decisions about the world of work. More elaborate recommendations included developing an Advertising Council TV and radio spot campaign to promote awareness that minorities can succeed in business, establishing a center for economic education that would develop programs and materials that could be used in schools and colleges, creating a center for affirmative action, and conducting career development workshops.

Following the leadership of the American Assembly of Collegiate Schools of Business Minorities Committee (AACSB), a project entitled Program to Increase Minorities in Business (PIMIB) has begun. This effort, supported by contributions from twelve corporations and foundations, has three goals:

(1) To collect primary and secondary data concerning the various educational pools of talent for each racial and ethnic group.

(2) To inventory existing programs which seek to increase the numbers of minorities in management and to evaluate their effectiveness and cost.

(3) To act as a means for diverse groups to coordinate their findings and recommendations and to provide broad credibility to those findings and recommendations.

Efforts to date include a literature search of materials dealing with the entry and status of minorities in business; a survey of deans of AACSB schools about any programs to increase minority representation; a survey of secondary school career education efforts, programs of business awareness, and attitudes of high school principals; and a survey of the decisions of 400 Black managers. Some of the preliminary findings were that many schools are doing very little to increase minority representation at this time, but would be interested in implementing any recommendations of the PIMIB project. Black MBA's emphasized the importance of role models, and 30 percent of Black MBA's made the decision to pursue careers in business after graduating from college.

Most of the efforts just described seem directed toward solving the first key problem of encouraging minority participation in graduate management study: changing minority students' perceptions of the demands and opportunities of business. Unfortunately, except for some figures on minority enrollments, there has been little direct information about the effectiveness of any of these programs and little work at identifying the most effective elements of the programs. Such evaluation research would seem called for before any general recommendation can be made about any particular program.

The second problem--finances--has been the subject of various programs. These include the Consortium Program for Graduate Study in Management. The Consortium was begun in 1966 by Indiana University, Washington University (St. Louis), and the University of Wisconsin with a grant from the Ford Foundation to "hasten the entry of Negroes into

managerial positions in business." Later, the University of North Carolina, Rochester, and the University of Southern California joined the Consortium. In addition to Blacks, recipients now include Chicanos, Cubans, Indian Americans and Puerto Ricans.

Funded by three foundations and many corporate contributors, students who qualify for admission to the Consortium receive a fellowship to pursue MBAs at one of the Consortium universities. In addition, the Consortium provides a summer preparatory program for students before their first year of study and a summer business internship program for students after their first year of study.

Another program is the Council for Opportunity in Graduate Management Education (COGME). The ten business schools represented by COGME, which was formed in 1970, are the University of California at Berkeley, Carnegie-Mellon University, the University of Chicago, Columbia University, Cornell University, Amos Tuck (Dartmouth), Harvard University, Alfred P. Sloan School of Management (MIT), Wharton (University of Pennsylvania), and Stanford University. COGME is an independent nonprofit organization with the objective of increasing the number of minority members in positions of managerial responsibility. A student must have already been accepted to one of the participating schools to win a COGME fellowship. Federal funding for this program is currently being administered under Title III of the Comprehensive Employment and Training Act.

The Accelerated Business Leadership Education Program (Project ABLE) is designed to identify, recruit, and train members of minority groups for business careers through a master's program in business administration

or accounting. Some students receive federal financial aid which entails an 18-month work commitment in a governmental agency; some students receive private support without such obligations. Participating schools include Atlanta University, NYU, Howard, Arizona, Massachusetts, and Syracuse.

Other financial assistance is available for minority students pursuing various specialties such as accounting, purchasing, actuarial science, insurance and banking. Other scholarship, fellowship and grant programs are available for minority students in various geographical areas, particular minority groups (e.g., members of the Cherokee Nation), and through individual business programs. These various programs are described by Wilson (1975) and Educational Testing Service's Graduate and professional school opportunities for minority students.

Although the GAPSFAS system is not a source of funds, it provides a service to students seeking financial aid by determining their financial needs.

Again, no publicly available evaluation of the effectiveness of these programs has been circulated although the groups have probably done such studies for their internal purposes. Consortium and COGME apply only to the programs involved; they are not general solutions to the problem. Furthermore, all of the aid programs may come too late, i.e., they are designed to help students who have decided to apply to graduate study in business. If students have already decided not to apply, they may never realize the opportunities for aid that exist. (One study nearing completion at ETS may shed some light on some of these issues. It examined the influence of GAPSFAS aid on disadvantaged students, so its results should be available for examination.)

Summary

Minority students seem to be highly motivated to achieve college and advanced educations. The problems are clearly not motivational. Rather the difficulties stem from the unequal distribution of minority students into types of colleges and types of programs and differential dropout rates. The result is that, despite a high enrollment rate in college, the pool of minority college seniors who could be recruited into graduate or professional school is smaller than it ideally would be. The evidence suggests that these students value stable incomes, opportunities for minority students, challenging activities, and the opportunities to help others in their careers. However, many students do not see business in this light. In addition, further education for minorities is hampered by their current indebtedness, their need for additional income, and the lack of the necessary finances. Various programs have attempted to alter minority students' perceptions of business and to provide the needed financial aid. The effectiveness of these programs, although probably high, has not been publicly demonstrated.

Directions for Future Research

With our current understanding of the situation facing minority students, what could be done either to increase our knowledge of minority career decisions or to directly influence minority student decisions?

One of the least expensive possibilities is to use the existing data on the follow-ups of the National Longitudinal Study (NLS) of the

high school class of 1972. The NLS was designed to provide an ongoing and updated data base containing statistics on a national sample of seniors as they move out of the American high school system into early adulthood. It began with a group-administered survey of 23,000 students conducted in spring 1972 prior to their leaving high school. This was followed by a series of periodic mail and personal interview follow-up surveys. The first follow-up survey was conducted from October 1973 to April 1974, the second from October 1974 to April 1975, the third from October 1976 to April 1977 and the fourth in 1979. The response rate through the third follow-up was approximately 85 percent. The purpose of these surveys was to obtain information about the basic educational and vocational activities of young adults and their continuing or revised plans, aspirations and attitudes. The data collected from the in-school and follow-up surveys have been merged and processed.

The basic data included a great deal of information about the student's backgrounds, plans, and activities. Of greatest interest here are the data on their educational status, type of program, reasons for changing fields, changing schools, and withdrawal, details about finances, reasons for not pursuing further education, reasons for attending and choosing a graduate or professional school, work experiences, family status, and experiences and opinions. The periodic follow-ups would allow researchers to chart the patterns of entry into different majors and graduate study and the reasons students left certain fields. These analyses could also be done for fields beyond business. The basic data tapes are available for nominal charges to qualified researchers. It is

probably the most extensive large scale longitudinal study of recent times. However, much of the information collected is categorical and designed to provide basic factual information. Information about more subtle variables such as students' perceptions of careers, views of the opportunity structure and work values are limited. In short, an inexpensive but fairly informative study could be conducted using this data.

A second possibility would be to study a sample of minority seniors in a group of representative colleges and compare this sample with a matching sample of Whites. These samples could be asked specific questions about their perceptions of various careers, opportunities, and obstacles in various areas; their indebtedness and other obligations; the role various people, materials, and publications played in their choices; their college experiences, etc. The specific content would be based on earlier research into influences on career decision-making processes, and on the views of experts on the attraction and recruitment of students to specific fields. This study could be conducted in colleges where the students are predominantly minority, and in colleges where the students are predominantly White. Differences in the results for minority students in each setting could be examined. This study would have the obvious advantage of being directed to answer the current questions of interest about minority and majority career decisions. However, it would be costly and require extensive data collection and processing.

A third possibility would be to design an intervention program that could be tried out in a small sample of colleges. This would consist

of developing materials that would demonstrate and dramatize the opportunities for minorities with MBAs, and the possibilities for minorities in schools of graduate management. Additional information might include a guide to sources of financial aid, affirmative action programs, etc. These materials might be distributed to minority students through counseling centers or offices of minority affairs. In any case, close cooperation would be sought with the minority student organizations on each campus. Perhaps special contact people could also be trained and sent to the colleges, and special "business opportunity workshops" conducted on each campus. Subsequently, the students who were contacted could be surveyed to assess their reactions to the program and its materials, and to determine their actual career plans and how they may have been influenced. Then, depending on the outcome, this intervention program might be broadened to other colleges.

Clearly, the first two possibilities would be more informative if they were carried out across fields. For example, if students shift from business to prelaw or social science, it would be important to understand the factors that entered into that decision. Likewise, if students enter business from other fields it would be useful to know why they left those fields as well as why they chose business. In any case, more research into the career decision making process among minority students needs to be done before truly effective intervention programs can be designed. The research reviewed here is suggestive of the directions in which this research should move.

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